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Substitute for form 1449/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet		2	of	2	Complete if Known	
				Application Number	10/603,130	
				Filing Date	June 24, 2003	
				First Named Inventor	Eric W. Limmatta	
				Group Art Unit	—	
				Examiner Name	—	
				Attorney Docket Number	SU-7275	

### OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
ELC	L-1	"4500-Cl Chlorine (Residual)"; Standard Methods for the Examination of Water and Wastewater; 18 <sup>th</sup> Edition, 1992, pages 4-36 to 4-37.	
	L-2	"Chlorine, Free and Total, For water, wastewater and seawater"; Hach Water Analysis Handbook; 3 <sup>rd</sup> Edition; 1997; pages 1206-1207.	
	L-3	Ikeme, A.I. et al.; "Extending the Shelf-Life of Chicken Broiler Meat"; Poultry Science, 1982; pages 2200-2207.	
	L-4	"Chlorination"; Handbook of Industrial Water Conditioning; 7 <sup>th</sup> Edition; 1976; pages 24-29.	
	L-5	Cantrell, Evisceration Equipment, from Cantrell website <a href="http://www.cantrell.com/evislist1.htm">http://www.cantrell.com/evislist1.htm</a> , website visited 9/19/2003, unknown publication date, 5 pages.	
	L-6	Meyn, Product Line, from website <a href="http://www.meyn.nl/product_line.html">http://www.meyn.nl/product_line.html</a> , website visited 1/31/2003, unknown publication date, 5 pages.	
	L-7	Baader Johnson, Your Partner for Complete Processing Solutions, Birdwasher IO505-16, published 2/22/2002, 2 pages.	
	L-8	Baader Johnson, Your Partner for Complete Processing Solutions, Birdwasher IO505-20, published 12/28/2000, 2 pages.	
	L-9	Cantrell, Inside/Outside Bird Washer, from Cantrell website <a href="http://www.cantrell.com/evislist1.htm">http://www.cantrell.com/evislist1.htm</a> , website visited 2/20/2003, unknown publication date, 1 pages.	
	L-10	TEKTRAN, United States Department of Agriculture, Agricultural Research Service, Updated 12-18-1998, "An Evaluation of On-Line "Reprocessing" on Visual Contamination and Microbiological Quality of Broilers", from website <a href="http://www.nal.usda.gov/ttic/tektran/data/000008/35/0000083511.html">http://www.nal.usda.gov/ttic/tektran/data/000008/35/0000083511.html</a> , website visited 1/31/2003, 1 page	
	L-11	Food Engineering: Multiple Hurdles Minimize Pathogens, Poultry Interventions, website <a href="http://www.foodengineeringmag.com/articles/1999/1299/1299f2.htm">http://www.foodengineeringmag.com/articles/1999/1299/1299f2.htm</a> , website visited 1/31/2003, 1 page, publication date unknown.	
	L-12	The University of Georgia Cooperative Extension Service, Poultry Tips, from website <a href="http://www.uga.edu/~poultry/tips/tips98jan4.htm">http://www.uga.edu/~poultry/tips/tips98jan4.htm</a> , website visited 1/31/2003, 3 pages.	
	L-13	Abstract of a presentation to the Annual Meeting of the International Association for Food Protection (formerly IAMFES), Atlanta, GA. August 9, 2000, Continuous On-line Processing of Fecal Contaminated Poultry Carcasses, from website <a href="http://www.sanova.com/abstract.html">http://www.sanova.com/abstract.html</a> , website visited 1/31/2003, 22 pages	
	L-14	Safe Foods Corporation, What is Cecure and how good is it?, from website <a href="http://www.safefoods.net/cecure.htm">http://www.safefoods.net/cecure.htm</a> , website visited 1/31/2003, 2 pages	
✓	L-15	Cantrell Machine Co., Inc., Brochure, Inside/Outside Bird Washer, Model No. FIO-515, 2 pages	
ELC	L-16	Food Engineering: Research & Development (1099), from website <a href="http://www.foodengineeringmag.com/articles/1999/1099/1099research.htm">http://www.foodengineeringmag.com/articles/1999/1099/1099research.htm</a> , website visited 1/31/2003, 3 pages	

Examiner Signature	Arthur L. Corbin	Date Considered	3-15-06
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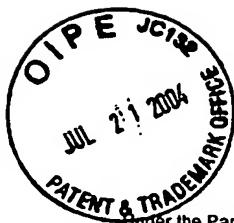
Substitute for form 1449/PTO				Complete if Known	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  First Supplemental (use as many sheets as necessary)				Application Number	10/603,130
				Filing Date	June 24, 2003
				First Named Inventor	Eric W. Liimatta
				Art Unit	— 1268
				Examiner Name	— Carlson
				Attorney Docket Number	SU-7275
Sheet	1	of	1		

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Examiner Signature	Arthur L. Gibson	Date Considered	5-15-66
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.<sup>1</sup> Applicant's unique citation designation number (optional).<sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04.<sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3).<sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.<sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible.<sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.  
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Substitute for form 1449/PTO		<b>Complete if Known</b>			
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> Second Supplemental (use as many sheets as necessary)		Application Number	10/603,130		
		Filing Date	June 24, 2003		
		First Named Inventor	Eric W. Liimatta		
		Group Art Unit	= 1765		
		Examiner Name	= Corbin		
Sheet	1	of	2	Attorney Docket Number	SU-7275

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
mc	L-17	Blaser, Martin J., et al., "Inactivation of <i>Campylobacter jejuni</i> by Chlorine and Monochloramine", Applied and Environmental Microbiology, vol 51, no. 2, 1986, ppg 307-311.	
	L-18	Carr, Anita C., "Differential reactivities of hypochlorous and hypobromous acids with purified <i>Escherichia coli</i> phospholipid: formation of haloamines and haloaldehydes", Biochimica et Biophysica, 1392, 1998, ppg 254-264.	
	L-19	Dickens, J.A., et al., "Efficacy of an Herbal Extract on the Microbiological Quality of Broiler During a Simulated Chill", Poultry Science, 2000, vol 79, ppg 1200-1203.	
	L-20	Fabrizio, K.A., et al., "Comparison of Electrolyzed Oxidizing Water with Various Antimicrobial Interventions to Reduce <i>Salmonella</i> Species on Poultry", Poultry Science, 2002, vol 81, ppg 1598-1605.	
	L-21	Hawkins, Clare L., et al., "Hypochlorite- and Hypobromite-Mediated Radical Formation and Its Role in Cell Lysis", Archives of Biochemistry and Biophysics, vol 395, no. 2, November 15, 2001, ppg 137-145.	
	L-22	Kumar, Krishan, et al., "Kinetics and Mechanism of General-Acid-Assisted Oxidation of Bromide by Hypochlorite and Hypochlorous Acid", Inorg. Chem., 1987, vol 26, ppg 2706-2711.	
	L-23	Lillard, H.S., "Effect of Trisodium Phosphate on <i>Salmonellae</i> Attached to Chicken Skin", Journal of Food Protection, vol 57, no. 6, June 1994, ppg 465-469.	
	L-24	Mead, G.C., et al., "The Effectiveness of In-plant Chlorination in Poultry Processing", Br. Poult. Sci., vol 16, 1975, ppg 517-526.	
	L-25	Northcutt, J.K., et al., "Effect of Broiler Age, Feed Withdrawal, and Transportation on Levels of Coliforms, <i>Campylobacter</i> , <i>Escherichia coli</i> and <i>Salmonella</i> on Carcasses Before and After", Poultry Science, 2003, vol 82, ppg 169-173.	
	L-26	Patterson, J.T., "Chlorination of Water Used For Poultry Processing", British Poultry Science, vol 9, part 2, 1968, ppg 129-133.	
	L-27	"9215 C. Spread Plate Method", Microbiological Examination (9000), ppg 9-38 - 9-40.	
	L-28	Tamblyn, K.C., et al., "Utilization of the Skin Attachment Model to Determine the Antibacterial Efficacy of Potential Carcass Treatments", Poultry Science, 1997, vol 76, ppg 1318-1323.	
	L-29	Tsai, Lee-Shin, et al., "Chlorination of Poultry Chiller Water: Chlorine Demand and Disinfection Efficiency", Poultry Science, 1992, vol 71, ppg 188-196	
✓	L-30	"Pathogen Reduction; Hazard Analysis and Critical Control Point (HACCP) Systems; Final Rule", Federal Register, July 25, 1996, vol 61, no 144, pp 38806-38814 and 38854-38855.	
mc	L-31	Vissers, Margret C.M., et al., "Comparison of human red cell lysis by hypochlorous and hypobromous acids: Insights into the mechanism of lysis", Biochem. J., vol 330, 1998, ppg 131-138.	

Examiner Signature	Arthur L. Corbin	Date Considered	5-15-06
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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

## Second Supplemental

<b>Complete if Known</b>	
<b>Application Number</b>	10/603,130
<b>Filing Date</b>	June 24, 2003
<b>First Named Inventor</b>	Eric W. Liimatta
<b>Group Art Unit</b>	---
<b>Examiner Name</b>	---
<b>Attorney Docket Number</b>	SU-7275

#### OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Signature	Arthur L. Corbin
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Date Considered	3-5-06
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<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

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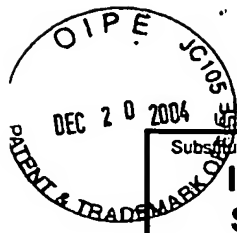
Substitute for form 1449/PTO <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> Third Supplemental (use as many sheets as necessary)				Control number. Complete if Known	
				Application Number	10/603,130
				Filing Date	June 24, 2003
				First Named Inventor	Eric W. Limmatta
				Art Unit	- 1965
				Examiner Name	- Corbin
				Attorney Docket Number	SU-7275
Sheet	1	of	1		

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Examiner Signature	ARTHUR L. GORDIN	Date Considered	5-15-06
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Substitute for form 1449A/PTO		<b>Complete if Known</b>			
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> Fourth Supplemental (use as many sheets as necessary)		Application Number	10/603,130		
		Filing Date	June 24, 2003		
		First Named Inventor	Eric W. Liimatta		
		Group Art Unit	— 576		
		Examiner Name	— Corbin		
Sheet	1	of	8	Attorney Docket Number	SU-7275

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
mc	US-18	US-1995639	03-26-1935	Henderson	—
	US-19	US-2443429	06-15-1948	Marks	—
	US-20	US-2662855	09-07-1950	Kamlett	—
	US-21	US-2779764	01-29-1957	Paterson	—
	US-22	US-2815311	12-03-1957	Ellis, et al.	—
	US-23	US-3412021	11-19-1968	Paterson	—
	US-24	US-3519569	07-07-1970	Diaz	—
	US-25	US-3558503	01-26-1971	Goodenough, et al.	—
	US-26	US-3850833	11-26-1974	Koceich, et al.	—
	US-27	US-4235599	11-25-1980	Davis, et al.	—
	US-28	US-4297224	10-27-1981	Macchiarolo, et al.	—
	US-29	US-4557926	12-10-1985	Nelson, et al.	—
	US-30	US-4643835	02-17-1987	Koeplin-Gall, et al.	—
	US-31	US-4872999	10-10-1989	Schild, et al.	—
	US-32	US-5130033	07-14-1992	Thornhill	—
	US-33	US-5141652	08-25-1992	Moore, et al.	—
	US-34	US-5209934	05-11-1993	Egis, et al.	—
	US-35	US-5264136	11-23-1993	Howarth, et al.	—
	US-36	US-5429723	07-04-1995	Atkinson	—
	US-37	US-5464636	11-07-1995	Hight, et al.	—
	US-38	US-5683654	11-04-1997	Dallmier, et al.	—
	US-39	US-5688515	11-18-1997	Kuechler, et al.	—
	US-40	US-6068861	05-30-2000	Moore, et al.	—
	US-41	US-6069142	05-30-2000	Gaffney, et al.	—
mc	US-42	US-6284144 B1	09-04-2001	Itzhak	—

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)			
mc	FP-8	WO 89/10696	11-16-1989	Great Lakes Chemical	—

Examiner Signature	Arthur L Corbin	Date Considered	5-15-06
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		Filing Date	June 24, 2003
		First Named Inventor	Eric W. Liimatta
		Group Art Unit	---
		Examiner Name	---
		Attorney Docket Number	SU-7275
Fourth Supplemental (use as many sheets as necessary)	Sheet 2 of 8		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
ju	L-35	Clare, A.S., "Marine Natural Product Antifoulants: Status and Potential," Biofouling (1996) 9: 211-229.	
	L-36	S. Tsukamoto, et al., "Ceratinamides A and B: New Antifouling Dibromotyrosine Derivatives from the Marine Sponge <i>Pseudoceratina purpurea</i> ," Tetrahedron (1996) 52: 8181-8186.	
	L-37	W. Miki, K. Kon-ya, and S. Mizobuchi, "Biofouling and Marine Biotechnology: New Antifoulants from Marine Invertebrates," Journal of Marine Biotechnology (1996) 4: 117-120.	
	L-38	H. Genthe, "The Incredible Sponge," Smithsonian (August 1998) 29: 50-58.	
	L-39	M. Givskov, et al., "Eukaryotic Interference with Homoserine Lactone-Mediated Prokaryotic Signaling," Journal of Bacteriology (1996) 178: 6618-6622.	
	L-40	D. Ren, J.J. Sims, and T.K. Wood, "Inhibition of Biofilm Formation and Swarming of <i>Bacillus subtilis</i> by (5Z)-4-Bromo-5-(Bromomethylene)-3-Butyl-2(5H)-Furanone," Letters in Applied Microbiology (2002) 34: 293-299.	
	L-41	M.E. Weeks, "Discovery of the Elements: XVII. The Halogen Family," Journal of Chemical Education (1932) 9: 1915-1938.	
	L-42	A.J. Balard, Annales de Chemie et de Physique (1826), vol 32, ppg 371-372.	
	L-43	H.S. Rzepa, "Elemental and Molecular Heritage: An Internet-Based Display," Molecules (1998) 3: 94-99.	
	L-44	B. Grinbaum and M. Friedman, "Bromine," in Kirk-Othmer Encyclopedia of Chemical Technology 4 <sup>th</sup> Ed. (New York, NY: John Wiley and Sons, Inc., 2001), vol 4, ppg 548-549.	
	L-45	F. Yaron, "Bromine Manufacture: Technology and Economic Aspects," in "Bromine and Its Compounds," Z.E. Jolles, ed., pp 3-12 (New York, NY: Academic Press, 1966).	
↓	L-46	"Bromine Brine," Arkansas Geological Commission, web address <a href="http://www.state.ar.us/agc/bromine.htm">www.state.ar.us/agc/bromine.htm</a> ; 1 page.	
ju	L-47	R.D. Bartholomew, "Bromine-based Biocides for Cooling Water Systems: A Literature Review," Paper IWC 98-74 (Pittsburgh, PA: Engineers' Society of Western Pennsylvania, 1998), 30 pages.	

Examiner Signature	Arthur L. Capin	Date Considered	3-15-06
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		Filing Date	June 24, 2003
		First Named Inventor	Eric W. Liimatta
		Group Art Unit	—
		Examiner Name	—
Fourth Supplemental (use as many sheets as necessary)		Attorney Docket Number	SU-7275
Sheet	3	of	8

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
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BR	L-48	F.W. Tanner and G. Pitner, "Germicidal Action of Bromine," Proceedings of the Society for Experimental Biology and Medicine (1939) 40: 143-145.	
	L-49	T.D. Beckwith and J.R. Moser, Journal of the American Water Works Association (1933) 25: 367-374.	
	L-50	D.R. Wood and E.T. Illing, Analyst (1930), Royal Society of Chemistry, The Analyst, 55: 126-127.	
	L-51	J. A. McCarthy, Journal of the New England Water Works Association (1944) 58: 55-68.	
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	L-55	E.K. Rideal and U.R. Evans, "The Effect of Alkalinity on the Use of Hypochlorites," Journal of the Society of the Chemical Industry (1921) 40: 64R-66R	
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Examiner Signature	Arthur L. Gordon	Date Considered	5-15-06
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	L-63	J.D. Johnson and W. Sun, "Bromine Disinfection of Wastewater," in "Disinfection-Water and Wastewater," J.D. Johnson, ed., pp 179-191 (Ann Arbor, MI: Ann Arbor Science, 1975).	
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	L-66	Y. Kott et al., "Effect of Halogens on Algae-III. Field Experiment," Water Research (1969) 3: 265-271.	
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	L-68	Y. Kott and J. Edlis, "Effect of Halogens on Algae-I. <i>Chlorella Sorokiniana</i> ," Water Research (1969) 3: 251-256.	
	L-69	"Evolution of Industrial Water Treatment," Betz Handbook of Industrial Water Conditioning, Seventh Edition, pp 7-15 (Trevose, PA: Betz Laboratories, Inc., 1976).	
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gce	L-75	A.E. Gillam and R.A. Morton, "The Absorption Spectra of Halogens and Inter-Halogen Compounds in Solution in Carbon Tetrachloride," Proceedings of the Royal Society (London) (1929) vol 124: 604-616.	

Examiner Signature	Arthur L. Corbin	Date Considered	5-15-06
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JS	L-76	S. Barratt and C.P. Stein, "On Bromine Chloride," Proceedings of the Royal Society (London) (1929) vol 122: 582-588.	
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Examiner Signature	Arthur L. Corbin	Date Considered	5-15-06
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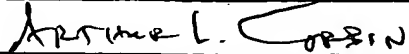
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<i>Be</i>	L-103	Howarth et al., "First Field Trials of Single-Feed, Liquid Bromine Biocide For Cooling Towers", Paper TP00-09 (Houston, Tx.: Cooling Technology Institute, Jan. 31-Feb 2, 2000), 17 pages	
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Examiner Signature	<i>Andrew L. Corbin</i>	Date Considered	<i>5-15-06</i>
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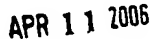
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AS	L-115	"Minimizing the Risk of Legionellosis Associated with Building Water Systems," ASHRAE Guideline 12-2000 (Atlanta, GA: ASHRAE, 2000), 19 pages.	
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Examiner Signature	ARTHUR L. SERBIN	Date Considered	5-15-06
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